very important. And the ability to stage is incredibly significant because it ultimately means that if they have the guidance systems—and they've already proven that they do by launching the satellite—that they will have almost an indefinite range across the world, because once they learn to stage, they can do almost anything in terms of reach.

Mr. AKIN. Reclaiming my time.

These are some of the missiles. This picture was taken before the launch this morning. And then we have a picture, I believe—I believe this picture was one released of the actual launch this morning. So you can see this appears to be a multistage kind of a missile, but we don't know the details on it yet because we haven't had the brief on it.

Mr. FRANKS of Arizona. This is a Sager, a solid fuel rocket that is something that we've known about for some time, and we knew the Iranians had it and at some point they would test it. But the danger of—

Mr. AKIN. Just reclaiming my time. Is this a multistage, do you believe?

Mr. FRANKS of Arizona. Yes. I'm convinced that it is.

The danger, of course, is that Iran is not only a dangerous enemy, to have these types of weapons, but they can sell and proliferate this type of weaponry. And when they prove that it works, it makes the price go up and it makes other countries who are trying to gain this technology much more interested in the technology. And I believe that it's important that we do whatever is necessary to prevent them from having successful tests in the future, including—and this is a big statement—including shooting those missiles down with our own missile defense capability, our Aegis capability when they come over international waters.

Mr. AKIN. We have a few more minutes to talk about that. I think people might be interested in how did this—how does this technology that we have work, because for years, people are saying, You can't do it; it is impossible.

I'm an engineer by training, and what we have developed in America—basically on the dream of Ronald Reagan—is an incredibly elegant solution. And from a physics point of view, this is the kind of thing that should inspire kids in school to be studying up on physics. And I didn't know if other Members want to join us.

We have Congressman BISHOP here. We'll talk a little bit about the way the thing works, and then we'll jump in.

And what we have when you talk about missile defense is you've got—basically you've got the boost stage where the enemy's rocket here, if this is aimed at our country or one of our allies, this is taking off. It's called a boost stage. Then as the missile starts to go more horizontally, it goes into what's called midcourse. And eventually, when it comes down on the target, and that's where it's reentering—if it's a very long-range missile, reentering the atmosphere.

So we kind of break missile defense into these three areas, and we have different technologies to try to shoot the thing down before it hits us. And our thinking is, well, the more shots you can get, the better, because if you miss with the boost phase, you may get it in midcourse. And if you miss in midcourse, you may still stop it in reentry. So we have different kinds of technologies.

But the main one that's been developed that's just incredible, from a physics point of view, is a metal-on-metal kill. We don't use any explosive in it. We just send the missile up, and the guidance is so accurate, and the head-on collision that we energize generates so much energy that it just literally vaporizes the missiles. And I would encourage my friend from Arizona to just sort of flesh out how it's done.

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Mr. FRANKS of Arizona. If you will permit me, I can get through this just briefly.

You know, the age-old argument against Ronald Reagan's perspective is that this like hitting a bullet with a bullet. Well, as General Obering, the former Defense agency head said this, he said, We don't just hit a bullet with a bullet. We hit a dot on the side of a bullet with a bullet consistently.

And interestingly enough, in recent days, you know, now they say well, there's so much fratricide, if there's some type of collision, that if there are multiple reentry vehicles or multiple vehicles, we wouldn't be able to hit all of them. But just recently we, in a test down in Hawaii, we shot a Scud missile off of a destroyer and it went 218 kilometers into the air and then, off of a THAD battery in one of the islands there, we shot two interceptor missiles 16 seconds apart to try to intercept this. The theory is if the first one hits, the second one will fly on by, and it's no big deal. If the first one misses, the second one will hit.

But here is the amazing thing that occurred. At 218 kilometers into the air, literally exo-atmospheric, into space, the first THAD interceptor hit the target dead center and blew it to smithereens. Fratricide was everywhere. And the second missile, they had it almost coordinated at that time to only 2 seconds apart, it picked the biggest piece, which was a little over a meter long, and hit it.

Now, let me suggest to you, if that doesn't light your fire, your wood is wet, because this was an incredible accomplishment by our missile defense agency, and it showed that our sensors have the capability of finding that most important target, even in an environment of that kind of fratricide, and it was an incredible accomplishment and you didn't hear it on the news.

Mr. AKIN. Reclaiming my time, it's interesting that you just explained something that really put a little spring in the step of a lot of Americans and should give an awful lot of our kids that are reading Popular Science and Popular Mechanics, that should fire them up, jazz them up a little bit, and there's not a word about this. All we hear is, oh, it won't work, it won't work, and the amazing thing is I've seen some of those pictures where here comes the enemy missile. These things are taken in fractions of a second, and you see basically the thing is creating through a sighting mechanism a target on the side of the enemy missile, and it is literally picking a spot, as you said. It's not hitting a bullet with a bullet. It's hitting that spot right on the missile where they want to hit it.

And to be able to do that—I've always been awfully skeptical as an engineer about when people say you can't do it. You know, when you tell Americans you can't do something, it's like, oh, yeah? Well, the fact of the matter is, we did, and as you said, not only did we hit the first missiles dead-on, we just picked off the biggest piece of scrap metal that was left after.

We've got our friend, Congressman BISHOP from Utah. If you would like to join us, we would love to have you in our discussion this evening.

Mr. BISHOP of Utah. I'd appreciate that because we have been talking about so many upbeat messages right here on what we can do, that I want to be the downer of the group and present the fear that we have simply because the administration budget for missile defense has been submitted.

And I'm grateful my friend from Arizona is still here, because in our land-based—maybe you can add and flush this out—our land-based interceptors, we have 30, and as short as nine months ago, every expert was telling us we need to have at least 44, and a backup site from the Alaska site down in California to be expanded at the same time. And yet mysteriously in this particular budget, somehow we have now changed the expert opinion that we only need 30 of these instead of 44. Even though in Alaska, where the site is, they are ready to start in the short construction period to building the extra silos that they may need. In fact, one person said it might be cheaper just to build them and use them as storage bays until we're ready for something else.

But maybe the gentleman from Arizona can talk about how significant this issue in the budget is and what this does to our potential defense, not just from Iran but from especially North Korea at the same time.

Mr. FRANKS of Arizona. Well, the gentleman speaks of a system called GMD, or ground-based mid-course defense, and it is our only system capable of defending the homeland against an incoming intercontinental ballistic missile from either North Korea or, in some cases in the United States, from Iran.

And the significance, as he said, just a year ago, there was a conviction that